ANALYSIS OF WORKING CAPITAL POSITION OF SELECTED PHARMACEUTICAL COMPANIES IN INDIA

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Abstract

Working capital management refers to management of current assets and of current liabilities. Every company may have an optimal level of working capital that maximizes their value. Prior evidence has determined the relationship between working capital and performance. The working capital management was determined by the cash conversion period and position of working capital, indicated by profitability and liquidity analysis. As the data selected for the study consists of observations in a time series manner so, analytical method is used in this study. Ten companies were selection during the study period is confined only 10 years from 2003-2004 to 2012-2013. The financial and statistical tools used for the study were Ratio Analysis, Descriptive Statistics and Indices. Results indicate that high investment in inventories and receivable lead to lower profitability and current assets to total assets lead to higher profitability. The results conclude that a strong relationship between working capital management and financial position of selected pharmaceutical companies in India.

Key Words: Liquidity Ratios, Turnover Ratio, Profitability Ratios, Business and Pharmaceutical Companies.

Introduction

In order to evaluate the financial performance of any enterprise, the financial analyst needs certain yardsticks. One of such yardsticks frequently used is a ratio. Ratios, as a tool of financial management, can be expressed as percentage or fraction and stated that comparison between the numbers. Ratio analysis provides guides and clues especially in spotting trends towards better or poor performance, and in finding out significant deviation from any average or relatively applicable standard. The working capital is the life-blood and nerve centre of a business firm. The importance of working

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capital in any industry needs no special emphasis. No business can run effectively without a sufficient quantity of working capital. It is crucial to retain right level of working capital. Working capital management is one of the most important functions of corporate management. A business enterprise with ample working capital is always in a position to avail advantages of any favorable opportunity either to buy raw materials or to implement a special order or to wait for enhanced market status. Working capital can be utilized for the payment of lease, employee's payroll, and pretty much any other operating costs that are involved in the everyday life of business. Even very successful business owners may need working capital funds when the unexpected circumstances arise. The overall success of the company depends upon its working capital position. So, it should be handled properly because it shows the efficiency and financial strength of company. Working capital management is highly important in firms as it is used to generate further returns for the stakeholders. When working capital is managed improperly, allocating more than enough of it will render management non-efficient and reduce the benefits of short term investments

Review of literature

George.W. Gallinger(2000)[1]has examined the frame work of financial statement analysis in five parts. First part of his study has focused on "return on asset performance". It has examined the profitability of Slaton Company. He has examined the component related to return on sale and asset management in depth. According to him, efficient asset management will result in destroyed market value of the company and will probably cause financial distress problems which may even result in bank corrupt. He has also revealed that if the weighted average cost of capital and a before tax basis exceeds the return on asset, the company would need to improve the performance through higher return on sales, increase asset turnover or both.

Bardia et al., (2011) [2] has conducted a study on pharmaceutical companies and used ratio analysis in conjunction with the techniques of inferential statistics to draw inferences regarding short-term solvency of the companies. In addition, statistical tools like, mean, standard deviation, coefficient of

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[1] George .W.Gallinger(2000) " A framework for financial statement analysis part I: Return on assets performance" Business Credit. Feb,Vol 102; issue 2, pp:103-115.

[2] Bardia. S C, Shweta Kastiya and Garima Bardia (2011) "Inferential Statistics as a Measure of Judging the Short- Term Solvency" An Empirical Study of Five Pharmaceutical Companies in India, The IUP Journal of Accounting Research &Audit Practices, Vol. X, No. 1, pp:285-364.

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variation (CV), analysis of variation (ANOVA) and student's t-test of hypothesis testing, have been applied. In the end, the study offers some meaningful suggestions in order to improve the short-term solvency of the pharmaceutical companies selected for this study.

Asha Sharma (2013)[3] his study examined that impact on liquidity as well profitability. The impact on effectiveness and profitability of working capital was tried to find out by measuring the fluctuation in fixed assets, current assets and sales. For this purpose conducted five years data from 2008 to 2012 of two major companies in public and private sector of steel industry like Steel Authority of India and Tata Steel Ltd., was undertaken. It was also tried to find out correlation among working capital to find along with their liquidity, efficiency and profitability. The study found that there was a significant negative relationship between liquidity and profitability. In this study made efforts were made to know that these ratios remained unchanged for any industry or varies from one industry to another. SAIL and TCS had perfect correlation between its fixed and current ratio and as well they had a perfect correlation with its liquidity and profitability. Keeping in view the miniature amount of finance literature, particularly in profitability, liquidity and working capital, the present study investigates the relationship of the aggressive and conservative financial performance analysis and financial polices and how its impact on profitability. It further examines that efficiency of working capital utilization among the working capital practices of the firms across the different industries.

Mobeen Ur Rehman and Naveed Anjum(2013)[4] empirically examine the effects of working capital management on the profitability of Pakistan cement industry. Secondary Data was collected from Annual Reports and the sample size is 10 consisting of Pakistan cement Companies listed in KSE from 2003-2008. The relationship between working capital management and profitability is examined using statistical tools. The result accepts the hypothesis that there is a positive relationship between working capital management and profitability on the cement sector of Pakistan.

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[3] Asha Sharma, "A Comparative Analysis of Working Capital Management between Public & Private Sector Steel Companies in India", *International Journal of Management and Social Sciences Research (IJMSSR),* Volume 2, No. 4, April 2013, pp: 77-82.
[4] Mobeen ur rehman,naveed anjum(2013), "determination of the impact of working capital management on profitability" an empirical study from the cement sector in pakistan asian economic and financial review,, 3(3):319- 332.

Gulshan Kumar (2013)[5] in his study makes an effort to investigate growth pattern and productivity trends of small-scale non-metallic mineral products industry in Punjab. The growth of industry has been measured in terms of four variables namely: number of units, fixed investment, direct employment and production. Yearly growth rates have been computed to mirror year-to-year fluctuations in growth and compound annual growth rates (CAGRs) have been worked out to find the impact of the policies of liberalized regime on growth of this industry. The study observed that the significant growth rate was observed in the variables namely number of units, fixed investment and production. But the policies of liberalized regime have resulted in qualitative rather than quantitative growth in the small scale non-metallic minerals products industry in Punjab. Highly significant growth rate was recorded in fixed investment and production, a slow growth was noticed in number of units but insignificant growth was gauged in employment during the liberalization period.

Objectives of the study

The study is designed to achieve the following objectives:

(i) To assess the working capital position of the selected Pharmaceuticals companies.

(ii) To examine the working capital state of affairs of the selected Pharmaceuticals companies.

(iii) To test the working capital strengths and weaknesses of selected   Pharmaceuticals firms.

(iv) To pinpoint the causes of poor working capital position and suggest some   measures   to overcome the problems.

Methodology

As the data selected for the study consists of observations in a time series manner so, analytical method is used in this study. As the complete source list of all the Pharmaceutical Companies is 174 listed companies as per the latest Balance Sheet available, the data for this study is selected based on convenience sampling method. The criteria while selecting the Pharmaceutical companies' Total Assets (Rs in Cr.) is an appropriate factor to determine the Financial Performance of the company. The companies which hold Total Assets of more than of Rs 5,000 Cr. is categorized as Large Scale Pharmaceutical Companies which are Piramal Enterprises, Dr.Reddys Labs, Cipla, Sun Pharma and

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[5] Dr.Gulshan Kumar Global (2013), "Journal of Science Frontier Research" Volume 11, Issue 2, March 2012, pp: 99-120.

Ranbaxy Labs. The companies which hold Total Assets of more than of Rs 2,500 Cr. and less than of Rs 5,000 Cr. is categorized as Medium Scale Pharmaceutical Companies such as   Jubilant Life, Cadila Health, Glenmark, Orchid Chemical and Divis Labs. The study period is confined only 10 years from 2003-2004 to 2012-2013. The financial and statistical tools used for the study were Ratio Analysis, Descriptive Statistics and Indices. In this study four variables are used utilization index, operating profit index, performance index, efficiency index and regression.

Limitation of the study

1. The study is restricted and limited to sample size of 10 selected pharmaceutical companies in India.

2. The effect of inflation has not been considered in the present study.

3. The result of analysis is subject to the same constraints as are applicable to statistical tool.

4. The study period is confined only 10 years from 2003-2004 to 2012-2013.

Theoretical Model Framework

The results of the selected companies financial ratios regarding to profitability, liquidity and turnover ratios for the purpose to prove the hypothesis two-way ANOVA has been applied for the following null hypothesis:

H_o: There is no significant difference between the selected ratios, among the selected companies and between years.

Liquidity Ratio

Liquidity ratios are the ratios that measure the ability of a company to meet its short term debt obligations. Liquidity is a pre-requisite for the survival of an enterprise. They show the number of times the short term debt obligations are covered by the cash and liquid assets. Generally, the higher the liquidity ratios are, the higher the margin of safety that the company posses to meet its current liabilities. Most common examples of liquidity ratios include Current Ratio, Quick Ratio and Debt-Equity Ratio.

1.1 Current Ratio

The current ratio in selected large scale and medium scale pharmaceutical companies in India has been shown in Table 1.1. A current ratio of 2:1 is considered an ideal one. If current ratio lowers than 2:1, the short term solvency of the firm is considered doubtful. Higher current ratios more than 2:1, is

considered to be indication that of the firm is liquid and can meet its short its short terms liabilities on maturity.

Table 1.1. - ANOVA (Two-Way)

Source of Variation	SS	DF	MS	F	P-VALUE	F CRIT
Between the companies	18.750	9	2.083	1.589	0.133	1.998
Between the years	98.085	9	10.898	8.311	0.000	1.998
Residual	106.214	81	1.311			
Total	223.048	99				

Source: Computed

In Table 1.1, the ANOVA test is applied to compare the mean value of current ratio between the selected companies and between the years. The F value of between the companies is 1.58 with F critical value of 1.99 and also proves that insignificant at 5% (F critical value > 0.05) whereas , the F value of between the years are 8.31 with F critical value 1.99 which proves that significant at 5% level of significance.

1.2. Quick Ratio

The quick ratio in selected large scale and medium scale pharmaceutical companies in India has been shown in Table 1.2. The standard liquid ratio is supposed to be 1:1 i.e. liquid assets should be equal to current liabilities. If the ratio is higher, i.e.; liquid assets are more than the current liabilities, the short term financial position is supposed to be very sound. If the ratio is low, i.e. current liabilities are more than the liquid assets, short term financial position of the business shall be deemed to be unsound.

Table 1.2. - ANOVA (Two-Way)

Source of Variation	SS	DF	MS	F	P-VALUE	F CRIT
Between the companies	15.058	9	1.673	1.445	0.183	1.998
Between the years	93.748	9	10.416	8.994	0.000	1.998
Residual	93.806	81	1.158			
Total	202.612	99				

Source: Computed

        In Table 1.2, the ANOVA test is applied to compare the mean value of Quick ratio between the selected companies and between the years. The F value of between the companies is 1.44 with F critical value of 1.99 and also proves that insignificant at 5% (F critical value > 0.05) whereas , the F value of between the years are 8.99 with F critical value 1.99 which proves that significant at 5% level of significance.

1.3. Debt-Equity Ratio

The Debt-Equity ratio in selected large scale and medium scale pharmaceutical companies in India has been shown in Table 1.3. A low debt-equity ratio implies a greater claim of owners than creditors. From the point of view of creditors, it represents a satisfactory situation since a high proportion of equity provides a larger margin of safety for them. During the periods of low profits, the debt servicing will prove to be less burdensome for a company with low debt-equity ratio.

Table 1.3. - ANOVA (Two-Way)

Source of Variation	SS	DF	MS	F	P-VALUE	F CRIT
Between the companies	1.507	9	0.167	0.599	0.794	1.998
Between the years	39.289	9	4.365	15.621	0.000	1.998
Residual	22.636	81	0.279			
Total	63.432	99				

Source: Computed

        In Table 1.4, the ANOVA test is applied to compare the mean value of   Debt-Equity   ratio between the selected companies and between the years. The F value of between the companies is 0.59 with F critical value of 1.99 and also proves that insignificant at 5% (F critical value > 0.05) whereas , the F value of between the years are 15.62 with F critical value 1.99 which proves that significant at 5% level of significance.

Suggestion and Recommendation

Liquidity Ratio

In large scale companies, all the four companies except Ranbaxy, the rest have higher current ratio than ideal ratio of 2:1; So Ranbaxy should improve its current ratio from 1.69 to 2. In medium scale companies, all the four companies except Jubilant life, remaining have higher current ratio than ideal ratio of 2:1. But jubilant has a current ratio of 1.91. So it should improve its current ratio above 2. To improve the current ratio the companies should increase their assets or decrease their current liabilities.

Sufficient quick ratio is maintained by all companies in large scale and medium scale. They should follow the same in the future period too.   All companies have lower debt equity ratio than ideal ratio of 2:1, except Orchid has 2.8:1. A lower debt equity ratio results lower profit to equity shareholder. It will also affect long term as well as short term solvency position of companies, so companies should increase their borrowing with minimum interest. It uses trading on equity technique to increase wealth of equity shareholders.

Turnover Ratio

Working capital is a base for day-to-day operation of business low working capital companies should increase their current assets, for break free production. Very high working capital also leads high liquidity but low profitability. So companies should maintain moderate working capital ratio, which leads to high liquidity and profitability. Number of days required to convert inventory into cash is known as inventory collection period. Higher number of days indicates that the company has poor inventory management system. Companies who have highest collection period should concentrate on its inventory management technique, to reduce number of days of inventory collection, and then only they can increase their profitability and maintain required working capital. Number of days required to collect cash from debtors is calculated by account receivable period. Companies who have higher days to collect cash from debtors fail to increase their profitability, fail to maintain adequate working capital. So they should follow proper collection technique and increase their liquidity position. Number of days required to pay creditors is calculated by accounts payable period. Companies who have minimum number of days to pay its suppliers, will increase the number of days by means of opting suitable buyer will lead to increase profitability and minimize working capital requirements.

Operating cycle period is a period from selling inventories to collecting cash. Minimum number of days of operating cycle indicates that the company has quickly converted its stock into cash.

The companies of higher operating cycle period should follow necessary debt collecting techniques to reduce number of days for collecting money from debtors. Companies have highest cash turnover ratio shows that it has good profitability position. It can easily maintain required cash level. So low cash turnover ratio companies should concentrate on increasing cash receipts and delaying cash position as it possible. Companies, who have lowest current asset turnover ratio implies that, they are the companies did not have sales in a quick time. It will decrease the rate of profitability so companies should concentrate to increase the sales.   The companies should maintain minimum current liability ratio. Highest current liability ratio indicates that the companies need to maintain higher amount of working capital to maintain its short term solvency position. It automatically reduces profitability of companies.

Profitability Ratio

Operating profit reveals operational efficiency of business concern. Low operating ratio companies like Ranbaxy, should concentrate on controlling their cost of sales and other operating expenses to revamp its operating ratio. Every stakeholder of business is mainly focusing on net profit of company. It will increase goodwill among the stakeholders. Minimum net profit companies like Orchid, should reduce its operating and non-operating expenses and also adopt proper marketing techniques to increase their sales and profit margin. Return Total Assets Ratio is an indicator, how effectively assets are used to increase its profitability. Low ratio indicates that assets are not efficiently used in business so the companies should plan properly and effectively use the idle assets to increase profitability.

Conclusions

The study has analyzed the working capital position of selected pharmaceutical companies in India. It can be concluded that the pharmaceutical companies have good liquidity position; their ratios were normally higher than ideal ratio. So they can easily meet their short term liabilities and working capital requirement. Secondly solvency position of the pharmaceutical companies were not satisfactory, it would suffer their long term borrowing. So they should improve their debt equity ratio. Conversion periods of working capital components were also longer period of time. It would affect the profitability of companies. So they should reduce their conversion period of for working capital components. So the selected pharmaceutical companies should control their cost of sales and other operating expenses to increase their profitability.

References:

1. George .W.Gallinger(2000) " A framework for financial statement analysis part I: Return on assets performance" Business Credit. Feb,Vol 102; issue 2, pp:103-115.

2. Bardia. S C, Shweta Kastiya and Garima Bardia (2011) "Inferential Statistics as a Measure of Judging the Short- Term Solvency" An Empirical Study of Five Pharmaceutical Companies in India, The IUP Journal of Accounting Research &Audit Practices, Vol. X, No. 1, pp:285-364.

3. Asha Sharma, "A Comparative Analysis of Working Capital Management between Public & Private Sector Steel Companies in India", *International Journal of Management and Social Sciences Research (IJMSSR),* Volume 2, No. 4, April 2013, pp: 77-82.

4. Mobeen ur rehman,naveed anjum(2013), "determination of the impact of working capital management on profitability" an empirical study from the cement sector in pakistan asian economic and financial review,, 3(3):319- 332.

5. Dr.Gulshan Kumar Global (2013), "Journal of Science Frontier Research" Volume 11, Issue 2, March 2012, pp: 99-120.